

- 1 1. (Twice amended) For an instrument responsive to recipe parameters, a method for
2 creating a recipe, the method comprising:
3 accessing mask set data;
4 recognizing a target structure in the mask set data; and
5 configuring the recipe parameters responsive to the recognized target structure, ~~before~~
6 without use of an exemplar of the mask set data ~~is created~~.
- 1 2. (Unamended) The method of claim 1 wherein the recipe parameters for a process
2 layer are queried from a database.
- 1 3. (Unamended) The method of claim 1 wherein the recipe parameters comprise at least
2 one of wafer processing parameters, inspection parameters, and control parameters.
- 1 4. (Unamended) The method of claim 1 wherein the target structure comprises at least
2 one of alignment site, measurement site, overlay target, and array element.
- 1 5. (Twice amended) For an instrument instructed by a recipe to perform a task on a
2 wafer, a method comprising:
3 receiving design data describing a die;
4 extracting parameters from the design data relevant to the configuration of the
5 instrument, ~~before~~ without using an exemplar of the design data ~~is created~~;
6 applying the extracted parameters to at least one die on the wafer; and
7 creating from the applied extracted parameters, the recipe for performing the task.
- 1 6. (Unamended) The method of claim 5 wherein the task includes at least one of
2 inspection and metrology.

- 1 7. (Unamended) The method of claim 5 wherein the applying uses a stepper setup file.
- 1 8. (Unamended) The method of claim 5 wherein the design data includes at least one of
2 element names and instance types.
- 1 9. (Unamended) The method of claim 5 further comprising inspecting the wafer using
2 the recipe.
- 1 10. (Unamended) The method of claim 9 wherein the inspecting is micro inspection.
- 1 11. (Unamended) The method of claim 9 wherein the inspecting is macro inspection.
- 1 12. (Unamended) The method of claim 9 wherein the inspecting is darkfield inspection.
- 1 13. (Unamended) The method of claim 5 further comprising measuring the wafer using
2 the recipe.
- 1 14. (Unamended) The method of claim 13 wherein the measuring is film measurement.
- 1 15. (Unamended) The method of claim 13 wherein the measuring is critical dimension
2 measurement.
- 1 16. (Unamended) The method of claim 13 wherein the measuring is overlay
2 measurement.
- 1 17. (Twice amended) A recipe extraction system using design data specifying one or
2 more die, the system comprising:
3 an access module to access the design data;
4 an analyzer to extract parameters from the design data; and

5 a configuration module to produce a recipe for controlling one of an inspection and a
6 metrology instrument, ~~before~~ without using an exemplar of the design set data is-
7 created.

1 18. (Unamended) The system of claim 17 wherein the access module is a network
2 interface.

1 19. (Unamended) The system of claim 17 wherein the analyzer performs overlay recipe
2 extraction.

1 20. (Unamended) The system of claim 17 wherein the analyzer performs inspection
2 recipe extraction.

1 21. (Unamended) The system of claim 17 wherein the recipe is a set of instructions for
2 measuring a wafer.

1 22. (Unamended) The system of claim 17 wherein the recipe is a set of instructions for
2 inspecting a wafer.

1 23. (Twice amended) An inspection/metrology instrument using design data specifying
2 one or more die, the instrument comprising:
3 an input interface for accessing the design data;
4 an analyzer to recognize target structures in the design data; and
5 a recipe module creating a recipe, ~~before~~ without using an exemplar of the design set
6 data ~~is created~~, in accordance with the recognized target structures.

1 24. (New) The method of claim 1, wherein the exemplar of the mask set data has not yet
2 been created.

1 25. (New) The method of claim 1, wherein the exemplar of the mask set data exists, but
2 is not used.

1 26. (New) The method of claim 5, wherein the exemplar of the design data has not yet
2 been created.

1 27. (New) The method of claim 5, wherein the exemplar of the design data exists, but is
2 not used.

1 28. (New) The method of claim 17, wherein the exemplar of the design data has not yet
2 been created.

1 29. (New) The method of claim 17, wherein the exemplar of the design data exists, but is
2 not used.

1 30. (New) The method of claim 23, wherein the exemplar of the design data has not yet
2 been created.

1 31. (New) The method of claim 23, wherein the exemplar of the design data exists, but is
2 not used.